

Claims

We claim:

- 1 1. A method of navigating a collection of nodes, comprising the steps:
 - 2 (a) selecting a first node;
 - 3 (b) generating a context list, each context including a second node with the second
4 node essentially referencing the first node; and
 - 5 (c) displaying the first node and the context list.
- 1 2. A method of navigating a collection of nodes as recited in claim 1
2 wherein generating the context list comprises the steps of:
3 querying for at least one context with the second node essentially referencing
4 the first node;
5 receiving a plurality of response contexts to the query; and
6 adding the plurality of the response contexts to the context list.
- 1 3. A method of navigating a collection of nodes as recited in claim 1
2 wherein each of the nodes in the node collection further includes an address;
3 wherein the address of each of the nodes represents a path and file designation
4 in a file management system; and
5 wherein generating the context list comprises selecting contexts with the
6 second node which is an alias of the first node.

- 1 4. A method of navigating a collection of nodes as recited in claim 1
2 wherein each context includes a resolution address and an attribute collection
3 comprised of at least one attribute, and
4 wherein generating an address from a collection of contexts, comprises the
5 steps of:
6 receiving a selected attribute collection; and
7 selecting the resolution address of one of the context of the context collection
8 as the generated address whenever the attribute collection of the context is
9 essentially the same as the selected attribute collection; and
10 wherein for each first context contained in the context collection and for each
11 second context contained in the context collection which is different from the
12 first context, the resolution address of the first context is different from the
13 resolution address of the second context; and the attribute collection of the
14 first context is not essentially the same as the attribute collection of the second
15 context.
- 1 5. A method of navigating a collection of nodes as recited in claim 4, further
2 comprising maintaining the collection of the contexts.
- 1 6. A method of navigating a collection of nodes as recited in claim 1
2 wherein each context list includes at least one context, each context including
3 a node and a collection of relationships, each relationship being applied to the
4 contexts of at least one of the context lists, and
5 wherein navigation of a plurality of the context lists comprises the steps of:
6 generating a shared node list from the relationship collection and from
7 the plurality of context lists; and
8 displaying the shared node list.

- 1 7. A method of navigating a collection of nodes as recited in claim 1
2 wherein at least one of the context lists contains at least one context, wherein
3 each context includes a node,
4 wherein the context list, context and node form a hypergraph that is navigated
5 by:
6 selecting a first context list of the context lists;
7 selecting a first context of the first context list; and
8 displaying the node of the first context of the first context list.
- 1 8. A computer program embodied on a computer readable medium for navigating
2 a collection of nodes, comprising:
3 (a) a code segment for selecting a first node;
4 (b) a code segment for generating a context list, each context including a second
5 node with the second node essentially referencing the first node; and
6 (c) code for displaying the first node and the context list.
- 1 9. A computer program embodied on a computer readable medium for navigating
2 a collection of nodes as recited in claim 8,
3 wherein the code segment for generating the context list comprises:
4 a code segment for querying for at least one context with the second node
5 essentially referencing the first node;
6 a code segment for receiving a plurality of response contexts to the query; and
7 a code segment for adding the plurality of the response contexts to the context
8 list.
- 1 10. A computer program embodied on a computer readable medium for navigating
2 a collection of nodes as recited in claim 8
3 wherein the code segment for each of the nodes in the node collection further
4 includes a code segment for an address;
5 wherein the code segment for the address of each of the nodes represents a
6 path and file designation in a file management system; and
7 wherein the code segment for generating the context list comprises code for
8 selecting contexts with the second node which is an alias of the first node.

- 1 11. A computer program embodied on a computer readable medium for navigating
2 a collection of nodes as recited in claim 8
3 wherein the code segment for each context includes a code segment for a
4 resolution address and an attribute collection comprised of at least one
5 attribute, and
6 wherein the code segment for generating an address from a collection of
7 contexts, comprises:
8 a code segment for receiving a selected attribute collection; and
9 a code segment for selecting the resolution address of one of the context of the
10 context collection as the generated address whenever the attribute collection of
11 the context is essentially the same as the selected attribute collection; and
12 wherein for each first context contained in the context collection and for each
13 second context contained in the context collection which is different from the
14 first context, the resolution address of the first context is different from the
15 resolution address of the second context; and the attribute collection of the
16 first context is not essentially the same as the attribute collection of the second
17 context.
- 1 12. A computer program embodied on a computer readable medium for navigating
2 a collection of nodes as recited in claim 11, further comprising a code segment
3 for maintaining the collection of the contexts.
- 1 13. A computer program embodied on a computer readable medium for navigating
2 a collection of nodes as recited in claim 8
3 wherein the code segment for each context list includes at least one context,
4 each context including a node and a collection of relationships, each
5 relationship being applied to the contexts of at least one of the context lists,
6 and
7 wherein navigation of a plurality of the context lists is executed by:
8 a code segment for generating a shared node list from the relationship
9 collection and from the plurality of context lists; and
10 a code segment for displaying the shared node list.

1 14. A computer program embodied on a computer readable medium for navigating
2 a collection of nodes as recited in claim 8
3 wherein the code segment for at least one of the context lists contains a code
4 segment for at least one context, wherein the code segment for each context
5 includes a code segment for a node,
6 wherein the code segment for the context list, context and node form a code
7 segment for a hypergraph, the code segment for a hypergraph having a code
8 segment for navigating comprising:
9 a code segment for selecting a first context list of the context lists;
10 a code segment for selecting a first context of the first context list; and
11 a code segment for displaying the node of the first context of the first
12 context list.

1 15. A system for navigating a collection of nodes, comprising:
2 (a) logic for selecting a first node;
3 (b) logic for generating a context list, each context including a second node with the
4 second node essentially referencing the first node; and
5 (c) logic for displaying the first node and the context list.

- 1 16. A system for navigating a collection of nodes as recited in claim 15
2 wherein logic for generating the context list comprises:
3 logic for querying for at least one context with the second node essentially
4 referencing the first node;
5 logic for receiving a plurality of response contexts to the query; and
6 logic for adding the plurality of the response contexts to the context list.
- 1 17. A system for navigating a collection of nodes as recited in claim 15
2 wherein each of the nodes in the node collection further includes an address;
3 wherein the address of each of the nodes represents a path and file designation
4 in a file management system; and
5 wherein logic for generating the context list comprises logic for selecting
6 contexts with the second node which is an alias of the first node.
- 1 18. A system for navigating a collection of nodes as recited in claim 15, wherein
2 each context list includes at least one context, each context including a node and a
3 collection of relationships, each relationship being applied to the contexts of at least
4 one of the context lists, and wherein logic for navigation of a plurality of the context
5 lists comprises:
6 logic for generating a shared node list from the relationship collection
7 and the plurality of context lists; and
8 logic for displaying the shared node list.